**Teste online**

Proiectul este o aplicaţie distribuită, cu implementare folosind tehnologii Java. S-au folosit: baza de date MySql, tehnologia Spring, iar pentru layerul de view Primefaces.

Aplicația este utilă pentru utilizatorii care vor să își testeze cunostințele, având atât o varietate de categorii de întrebări, cât și de întrebări. Mai mult, un utilizator poate să vadă diverse statistici, poate să își vadă propriile rezultate și cele mai bune rezultate pentru diferite categorii.

Este un proiect de tip Maven , cu urmatoarea structura generala:

**src**

**main**

**test**

**pom.xml**

Descriere continut

In pachetul/src/main avem:

* Java / edu / online tests

Backend

Config -> ApplicationConfig.java

Exception-> ServerException.java

Persistance

CategoryDao

PersistanceManager

QuestionDao

QuestionStatisticDao

TestDao

UserDao

jpaDao->JPACategoryDao

JPAQuestionDao

JPAQuestionStatisticDao

JPATestDao

JPAUserDao

Service

CategoryService

QuestionService

TestService

UserService

Impl -> CategoryService Impl

QuestionService Impl

TestService Impl

UserService Impl

Validator

UserValidator

ValidatorAspect

Annotation -> Validation

filters-> LoginFilter

frontend

controller

AboutController

CategoryResultsController

QuizController

RegisterController

StatisticsController

UserController

dto

QuestionStatisticDTO

Pages.java

model

Category

Gender

Question

QuestionStatistic

TestResult

TestResultPK

User

builder

TestResultBuilder

TestResultBuilderImpl

UserBuilder

UserBuilderImpl

utils

PropertiesProvider.java

* Java/edu/resources

META-INF -> persistence.xml

data.sql

drop\_tables.sql

log4j.properties

setup\_db.sql

* Java/edu/webapp

about.xhtml

login.xhtml

register.xhtml

WEB-INF ->

applicationContext.xml

faces-config.xml

web.xml

css->

back.css

main.css

style.css

pages->

categoryresults.xhtml

finished.xhtml

main.xhtml

ownresults.xhtml

quiz.xhtml

statistics.xhtml

Componente aplicatie:

O scurta prezentare a compozitiei pachetelor principal componente ale aplicatiei:

[**online-tests**](https://github.com/OnlineTests/online-tests)/[src](https://github.com/OnlineTests/online-tests/tree/master/src)/[main](https://github.com/OnlineTests/online-tests/tree/master/src/main)/[java](https://github.com/OnlineTests/online-tests/tree/master/src/main/java)/[edu](https://github.com/OnlineTests/online-tests/tree/master/src/main/java/edu)/[onlinetests](https://github.com/OnlineTests/online-tests/tree/master/src/main/java/edu/onlinetests)/[backend](https://github.com/OnlineTests/online-tests/tree/master/src/main/java/edu/onlinetests/backend)/**persistance**/

Avem definite atat clasa PersistanceManager cat si interfetele DAO

In pachetul jpadao avem implementarile .Aici folosind PersistanceManager am creat queriuri corespunzatoare functionalitatilor alese.

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In service se gasesc interfetele CategoryService,QuestionService,TestService, User Service; precum si clasele care le implementeaza.

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This package contains an Exception class that implements RuntimeException

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Validarea clasei User din model.

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**Implementarea filtrului de login , metoda cu signatura:**

public void doFilter(ServletRequest request, ServletResponse response,FilterChain chain) throws IOException, ServletException {..}

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Definirea controllerelor pt CategoryResults,Quizz,Register,Statistics,User ; precum si paginile about si main. Clase pojo

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Acest pachet contine clasa **QuestionStatisticDTO.java , cu procentaj pt fiecare raspuns , raspunsul corect si numarul de raspunsuri.**

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**Definirea paginilor de redirectare spre locatia corespunzatoare.**

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Clase persistente pt tabelele din baza de date : Category,Question,QuestionStatistic,TestResult si User

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Clasele abstracte TestResultBuilder si ResultBuilder , precum si clasele ce le extind.

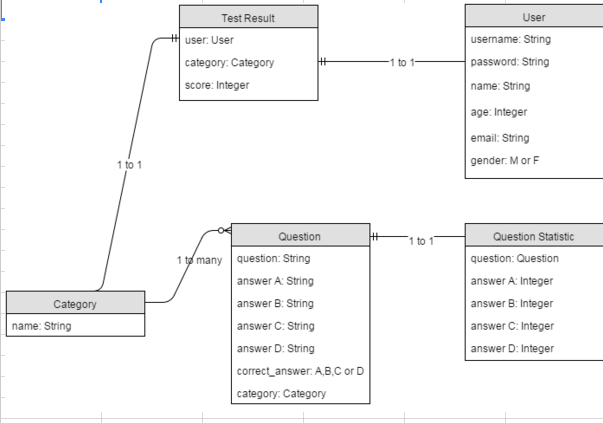
[**online-tests**](https://github.com/OnlineTests/online-tests)/[src](https://github.com/OnlineTests/online-tests/tree/master/src)/[main](https://github.com/OnlineTests/online-tests/tree/master/src/main)/[java](https://github.com/OnlineTests/online-tests/tree/master/src/main/java)/[edu](https://github.com/OnlineTests/online-tests/tree/master/src/main/java/edu)/[onlinetests](https://github.com/OnlineTests/online-tests/tree/master/src/main/java/edu/onlinetests)/**utils**/

Clase cu functii care pun la dispozitie diverse date utile.

Ex. returnarea liniilor dintr-un fisier return IOUtils.readLines(input);

**Diagrama bazei de date**

Diagrama bazei de date are structura:



Contributia fiecarui membru al echipei:

|  |  |
| --- | --- |
| **Taskuri** | **Membrii** |
| analiza si proiectare | Arnold |
| crearea structurii proiectului | Arnold |
| crearea bazei de date | Arnold |
| popularea bazei de date | Georgiana,Andra |
| generarea modelului | Arnold |
| manipularea bazei de date | Paula,Andra,Arnold |
| crearea serviciilor | Andra,Arnold |
| crearea claselor de exceptie si validare corespunzatoare | Arnold |
| crearea controllerului | Andra,Arnold |
| crearea paginilor (folosind Primefaces cu xhtml, js, css) | Arnold,Andra |
| testarea functionalitatilor pe partea de frontend | Arnold,Andra |
| testarea functionalitatilor pe partea de backend (unit test) | Georgiana,Arnold |
| documentatie | Paula,Andra |